

## PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS TYPE A-1 RESIDENTIAL BUILDINGS. BASED ON 2003 IRC & 2003 IECC WINDOW PERCENTAGE OF GROSS EXTERIOR WALL AREA

## ALL GLAZING SHALL MEET (SHGC) MAXIMUM SOLAR HEAT GAIN COEFFICIENT FACTOR

Percent	SHGC	Maximum	Minimum			
	Lower is	Glazing	Ceiling	Exterior wall	Floor	Crawl space
	better.	U- factor	R-value	R-value	R-value	R-value
15%	0.40	0.75	R-19	R-11	R-11	R-5
18%	0.40	0.70	R-26	R-13	R-11	R-5
20%	0.40	0.70	R-30	R-13	R-11	R-5
25%	0.40	0.55	R-30	R-13	R-11	R-5

**AIR LEAKAGE**: JOINTS, PENETRATIONS, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE THAT ARE SOURCES OF AIR LEAKAGE SHALL BE SEALED.
RECESSED LIGHTS SHALL BE TYPE-IC OR IF NON-IC INSTALLED INSIDE AN AIR TIGHT ASSEMBLY.

**DUCT INSULATION:** R-5 IN UNCONDITIONED SPACE, R-8 OUTSIDE BUILDING, VAPOR RETARDER REQUIRED.

**DUCT CONSTRUCTION:** ALL JOINTS AND SEAMS SHALL BE SEALED WITH WELDS, MASTICS OR GASKETS OR APPROVED TAPES. DUCT TAPE IS NOT PERMITTED. HVAC SYSTEMS MUST PROVIDE A MEANS FOR BALANCING AIR AND WATER.

**TEMPERATURE CONTROLS:** A MANUAL OR AUTOMATIC MEANES TO PARTIALLY RESTRICT OR SHUT OFF HEATING AND OR COOLING INPUT TO EACH ZONE OR FLOOR SHALL BE PROVIDED.

**WATER HEATERS:** REQUIRE HEAT TRAPS ON BOTH INLET AND OUT LET UNLESS THE WATER HEATER HAS AN INTEGRALHEAT TRAP OR IS PART OF A CIRCULATING SYSTEM.

**POOLS:** ALL HEATED POOLS MUST HAVE AN ON/OFF HEATER SWITCHH AND REQUIRE A COVER UNLESS 20% OF THE HEATING IS FROM NON-DEPLEATABLE SOURCES. POOL PUMPS REQUIRE A TIME CLOCK.

**HVAC PIPING INSULATION:** <u>COOLING SYSTEMS</u> CHILLED WATER, REFRIGERANT, AND BRINE WITH FLUID TEMP 40-55 F. ½" INSULATION UP TO 1" PIPE, ¾"INSULATION FOR PIPE 1 ½" TO 2". DOUBLE INSULATION THICKNESS IF BELOW 40 F.

FENESTRATIONS SHALL ALL BE LABLED WITH AN NFRC STICKER, IT SHALL NOT BE REMOVED UNTIL AN INSULATION INSPECTION HAS PASSED

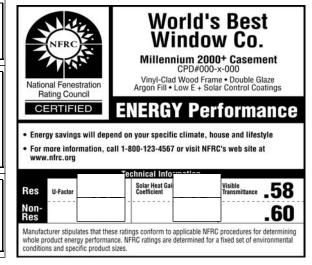
## **WINDOW AREA EXEMPT.**

ONE PERCENT OF THE TOTAL WINDOW AREA COMPUTED SHALL BE EXEMPT FROM THE U-VALUE

**GLAZZING FACTOR** BUTT GLAZZING COULD BE USED IF ONE PERCENT OR LESS OF TOTAL AREA

ACTUAL WINDOW AREA SHALL BE COMPUTED, INCLUDE SKYLIGHTS, ABOVE GRADE WINDOWS AND IF BASEMENTS ARE CONDITIONED BASEMENT WINDOWS

SAMPLE WINDOW STICKER



OTHER MEANS OF SHOWING COMPLIANCE ARE AVAILABLE TO THE APPLICANT. CHAPTER 4
SYSTEMS ANALYSIS, CHAPTER 5 COMPONENT PERFORMANCE OR RES- CHECK COMPLIANCE
SOFTWARE. http://www.energycodes.gov/rescheck/download.stm Effective Feb. 9th 2004

WINDOWS	DOORS	SKYLIGHTS		
FRONT	FRONT	ROOF		
		TOTAL AREA		
REAR	REAR			
		EXAMPLE		
		OPENING AREA DIVIDED BY		
		TOTAL WALL AREA		
		500 SQR T.OF OPENINGS DIVIDED		
		BY GROSS WALL AREA 2000 SQR		
		FT. 500 / 2000 = .25 X100 IS 25%		
		GROSS OPENING AREA		
SIDES	SIDES			
		GROSS WALL AREA		
		PERCENT OF OPENINGS		
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TOTAL AREA	TOTAL AREA			
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